Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): In a point to multipoint network operating according to a DOCSIS-based MAC protocol, a method for operating a subscriber unit, said method comprising:

transmitting data to a central access point during a directed grant slot allocated to said subscriber unit;

determining if said transmitted data qualifies for ARQ; and

if said transmitted data qualifies for ARQ:

monitoring MAP messages broadcast by said central access point to detect acknowledgment of receipt of said data transmitted during said directed grant slot; and

if no acknowledgment of receipt of said data transmitted during said directed grant slot is indicated by said MAP messages, retransmitting said data;

wherein non-receipt is indicated by said MAP messages if a MAP message is received with a timestamp later than said directed grant ~~grand~~ slot and no acknowledgement is received.

Claim 2 (canceled).

Claim 3 (previously presented): The method of claim 1 further comprising:

after transmitting said data to said central access point during said directed grant slot, storing said data in an ARQ buffer for possible retransmission.

Claim 4 (original): The method of claim 3 wherein storing said data comprises storing said data only if communication of said data is delay tolerant.

Claim 5 (currently amended): In a point to multipoint network operating according to a DOCSIS-based MAC protocol, a method for operating a central access point, said method comprising:

receiving data from a subscriber unit during a directed grant slot allocated to said subscriber unit; and

broadcasting a MAP message including an acknowledgment of receipt of said data received during said directed grant slot~~, as well as~~ and a time stamp indicative of a latest time slot for which successful receipt of a data packet during that time slot was acknowledged, if said directed grant slot is allocated to data that qualifies for ARQ.

Claim 6 (previously presented): The method of claim 5 wherein said data qualifies for ARQ if said data is delay tolerant.

Claim 7 (original): The method of claim 5 further comprising:

prior to said directed grant slot, broadcasting another MAP message allocating said directed grant slot to said subscriber unit.

Claim 8 (currently amended): In a point to multipoint network operating according to a DOCSIS-based MAC protocol, apparatus for operating a subscriber unit, said apparatus comprising:

a MAC layer processor that transmits data to a central access point during a directed grant slot allocated to said subscriber unit, monitors MAP messages broadcast by said central access point to detect acknowledgment of receipt of said data transmitted during said directed grant slot, and determines if said transmitted data qualifies for ARQ;

and an ARQ buffer that stores said data transmitted during said directed grant slot after it is transmitted if said transmitted data qualifies for ARQ; and

wherein if no acknowledgment of receipt is indicated by said MAP messages, said MAC layer processor retrieves said data from said ARQ buffer and retransmits said data;

wherein non-receipt is indicated by said MAP messages if a MAP message is received with a timestamp later than said directed grant ~~grand~~ slot and no acknowledgement is received.

Claim 9 (canceled).

Claim 10 (original): The apparatus of claim 8 wherein said ARQ buffer stores said data only if communication of said data is delay tolerant.

Claim 11 (currently amended): In a point to multipoint network operating according to a DOCSIS-based MAC protocol, apparatus for operating a central access point, said apparatus comprising:

a physical layer transceiver that exchanges information signals with a subscriber unit via a transmission medium; and

a MAC layer processor that receives data during a directed grant slot allocated to said subscriber unit via said physical layer transceiver and that broadcasts a MAP message including an acknowledgment of receipt of said data received during said directed grant slot~~, as well as~~ and a time stamp indicative of a latest time slot for which successful receipt of a data packet during that time slot was acknowledged, if said directed grant slot is allocated to data that qualifies for ARQ.

Claim 12 (original): The apparatus of claim 11 wherein said acknowledgment is included only if said data is delay tolerant.

Claim 13 (original): The apparatus of claim 11 wherein said MAC layer processor, prior to said directed grant slot, broadcasts another MAP message allocating said directed grant slot to said subscriber unit.

Claim 14 (currently amended): In a point to multipoint network operating according to a DOCSIS-based MAC protocol, apparatus for operating a subscriber unit, said apparatus comprising:

means for transmitting data to a central access point during a directed grant slot allocated to said subscriber unit;

means for determining if said transmitted data qualifies for ARQ; and means for monitoring MAP messages broadcast by said central access point to detect acknowledgment of receipt of said data transmitted during said directed grant slot; and

means for, if no acknowledgment of receipt is indicated by said MAP messages, retransmitting said data, if said transmitted data qualifies for ARQ;

wherein non-receipt is indicated by said MAP messages if a MAP message is received with a timestamp later than said directed grant ~~grand~~ slot and no acknowledgement is received.

Claim 15 (currently amended): In a point to multipoint network operating according to a DOCSIS-based MAC protocol, apparatus for operating a central access point, said apparatus comprising:

means for receiving data from a subscriber unit during a directed grant slot allocated to said subscriber unit; and

means for broadcasting a MAP message including an acknowledgment of receipt of said data received during said directed grant slot~~, as well as~~ and a time stamp indicative of a latest time slot for which successful receipt of a data packet during that time slot was acknowledged, if said directed grant slot is allocated to data that qualifies for ARQ.

Claim 16 (currently amended): In a point to multipoint network operating according to a DOCSIS-based MAC protocol, a computer program product for operating a subscriber unit, said computer program product comprising:

code that causes transmission of data to a central access point during a directed grant slot allocated to said subscriber unit;

code that determines if said transmitted data qualifies for ARQ;

code that causes monitoring of MAP messages broadcast by said central access point to detect acknowledgment of receipt of said data transmitted during said directed grant slot;

code that causes, if no acknowledgment of receipt is indicated by said MAP messages, retransmission of said data if said transmitted data qualifies for ARQ; and

a computer-readable medium that stores the codes; ~~codes,~~

wherein non-receipt is indicated by said MAP messages if a MAP message is received with a timestamp later than said directed grant slot and no acknowledgement is received.

Claim 17 (canceled).

Claim 18 (original): The computer program product of claim 16 further comprising:

code that causes, after transmission of said data to said central access point, storing of said data in an ARQ buffer for possible retransmission.

Claim 19 (original): The computer program product of claim 18 wherein said code that causes storing of said data causes storing of said data only if communication of said data is delay tolerant.

Claim 20 (currently amended): In a point to multipoint network operating according to a DOCSIS-based MAC protocol, a computer program product for operating a central access point, said computer program product comprising:

code that causes reception of data from a subscriber unit during a directed grant slot allocated to said subscriber unit;

code that causes broadcasting of a MAP message including an acknowledgment of receipt of said data received during said directed grant slot~~, as well as~~ and a time stamp indicative of a latest time slot for which successful receipt of a data packet during that time slot was acknowledged, if said directed grant slot is allocated to data that qualifies for ARQ; and

a computer-readable storage medium that stores the codes.

Claim 21 (original): The computer program product of claim 20 wherein said acknowledgment is included only if said data is delay tolerant.

Claim 22 (original): The computer program product of claim 20 further comprising:

code that, prior to said directed grant slot, causes broadcasting of another MAP message allocating said directed grant slot to said subscriber unit.

Claim 23 (currently amended): In a point to multipoint network operating according to a DOCSIS-based MAC protocol, a method for operating a subscriber unit, said method comprising:

transmitting an access request to a central access point on a request/data slot, the access request being arranged to request access to transmit data upstream;

receiving a first MAP message in response to the access request, the first MAP message being arranged to allocate a directed grant slot to the subscriber unit, the directed grant slot being arranged such that substantially only the subscriber unit may transmit during the directed grant slot;

transmitting the data to the central access point during the directed grant slot allocated to the subscriber unit;

determining if said transmitted data qualifies for ARQ; and

if said transmitted data qualifies for ARQ:

monitoring a plurality of MAP messages broadcast by the central access point to detect acknowledgment of receipt of the data transmitted to the central access point during the directed grant slot; and

when no acknowledgment of receipt of the data transmitted during the directed grant slot is indicated by the plurality of MAP messages, retransmitting the data transmitted to the central access point during the directed grant slot;

wherein non-receipt is indicated by said MAP messages if a MAP message is received with a timestamp later than said directed grant ~~grand~~ slot and no acknowledgement is received.

Claim 24 (previously presented): The method of claim 23 further including:

determining when to store the data transmitted to the central access point during the directed grant slot; and

storing the data transmitted to the central access point during the directed grant slot when it is determined that the data transmitted to the central access point during the directed grant slot is to be stored, where the data transmitted to the central access point during the directed grant slot is retransmitted when the data transmitted to the central access point during the directed grant slot is stored and when there is no acknowledgement of receipt of the data transmitted during the directed grant slot.

Claim 25 (previously presented): The method of claim 1 further comprising determining if a time stamp of said MAP message indicates a time after said directed grant slot.

Claim 26 (previously presented): The method of claim 25 wherein said data is retransmitted only if said MAP time stamp indicates a time after said directed grant slot.

Claim 27 (previously presented): The method of claim 5 further comprising receiving an access request from a subscriber unit for time to be reserved to transmit data, and wherein said access request comprises a subscriber identifier value associated with a service flow of said data.

Claim 28 (previously presented): The method of claim 27 further comprising sending a MAP message comprising an information element identifying a directed grant slot reserved for upstream data transmission.

Claim 29 (previously presented): The method of claim 5 wherein broadcasting a MAP message comprises automatically broadcasting a MAP message each time data is received during said directed grant slot.